

Surplus Success...

"Is Surplus Important? Very!"



Ed Kinder,
machine shop supervisor.

Retired Shop Supervisor, Verl Perry and his replacement Ed Kinder are leading the way in the creation of a wonderland of medical technology from what seemed like State and Federal Surplus junk. From "heal"acoptors to cancer treatment equipment to artificial limbs to valves for the artificial heart, the creative minds at the University of Utah's School of Medicine Machine Shop are able

to develop and design medical devices that are helping doctors save lives.

As the two men weave in and out of their jungle of giant machines, there seems to be a story attached to each one:

"This came from surplus, this is used to make hip joints, ankle joints, Harrington rods (devices used in the treatment of Scoliosis)"; "We designed the life support system for the 'heal'acoptor with this one"; "With this computer controlled lathe, we did a lot of work for Oncology (cancer treatment)", and they say they could do so much more, but there just isn't the enough money.

"Research is very important. For instance, if I have a tumor, and they treat the tumor, it's going to burn the skin [around the affected area]. Radiation burns never heal, this machine could make it so the radiation wouldn't burn the skin, but would still treat the cancer. But we're not doing it, because the funding has never been there to go ahead with the project." Perry said.

Some of the projects that have been funded are being used at the University Hospital, Stephen Moulding, Supervisor of the Biomedical Engineering Department, explained that Surplus Property can be found throughout the hospital. In the research labs surplus army power supplies and oscilloscopes are used, surplus motors are used to keep the hospital running and until Y2K, surplus equipment kept the time in the hospital and surrounding buildings. But by far the most impressive piece of surplus has been made into a machine that makes body shields for people undergoing cancer treatment.

"Radiation therapy is a serious treatment because you're actually destroying tissue in the body.

What this machine does, by looking at the x-ray of a patient and identifying the target area, we can then make [medal] shields that can be used during the treatment to shield the areas they [the doctors] don't want radiated," said Moulding, who designed the equipment. He went on to explain that before the use of this technology, many patients didn't survive the treatment due to radiation poisoning. Patient survival rate of is now much higher. The equipment is now manufactured and sold worldwide.

The doctors at the hospital wanted to be able to inform their patients what would happen after areas of the brain are destroyed during radiation therapy. With materials from Surplus Property the team was able to conduct the research needed to provide the doctors with the information they had requested.

An electrician for the hospital, Don Butler added, that Machine Shop team and Surplus Property saved the hospital hundreds of thousands of dollars throughout the years.

"They have the ability to see the roses through the weeds, so to speak," he said. "Just untold amount of equipment, that we could not have done without, was built through the Machine Shop." Ed Kinder and his team of unsung hero's will continue to research and design mechanical equipment in the School of Medicine Machine Shop Center for Advanced Medical Technology, where they answer the question of, "how do you know you can build that", with "how do you know I can't."



Steve Moulding and Don Butler

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